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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,340	07/09/2003	Peter D. Pierce	1779A	1489
7590	10/22/2004		EXAMINER	
Cynthia L. Foulke NATIONAL STARCH AND CHEMICAL COMPANY 10 Finderne Avenue Bridgewater, NJ 08807-0500			MIGGINS, MICHAEL C	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/616,340	PIERCE ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Michael C. Miggins	1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(d)

## Status

1)  Responsive to communication(s) filed on 21 July 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 5-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 5-17 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **WITHDRAWN REJECTIONS**

1. All of the 102(e), 103(a), the obviousness-type double patenting rejections set forth in the non-final rejection of 4/22/04, pages 2-7, paragraphs 1-9 have been withdrawn.

### **REJECTIONS REPEATED**

2. There are no rejections repeated.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claims 5-17 have been considered but are moot in view of the new ground(s) of rejection.

### **NEW REJECTIONS**

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 7-10, 12-13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lennon et al. (U.S. Patent No. 5,586,963) in view of JP Patent No. 57143370 A (English translation of abstract provided herein).

Lennon et al. teach a paper or paperboard core or tube (column 4, lines 1-24) comprising an aqueous polyvinyl acetate adhesive (column 9, lines 26-32), wherein one or more paper or paperboard materials are bonded together with the adhesive (column 9, lines 26-32), which is a single ply core or tube (column 4, lines 1-24), which is a multi-ply core or tube (column 4, lines 25-51), wherein the core or tube is used in the tissue, towel, carpet, textile, plastic film, paper, food or industrial storage industry (column 10, lines 4-10) (applies to instant claims 5, 7-10 and 12).

Lennon et al. teach a method for preparing a paper or paperboard core or tube comprising bonding together one or more plies of paper or paperboard material (column 9, lines 47-67) with a polyvinyl acetate adhesive (column 9, lines 26-32), wherein the adhesive is applied to the ply material as the core or tube is wound (column 9, lines 47-67), which is a single ply core or tube (column 4, lines 1-24), which is a multi-ply core or tube (column 10, lines 4-10) (applies to instant claims 13 and 15-17).

Lennon et al. disclose applicant's invention substantially as claimed. However, Lennon et al. do not teach a foamed polyvinyl acetate aqueous adhesive.

JP Patent No. 57143370 A teaches a foamed polyvinyl acetate aqueous adhesive for use on paper (see English translation of abstract provided herein) for the purpose of providing improved adhesion and using less adhesive (applies to instant claims 5 and 12-13).

The references are analogous because both are drawn to aqueous polyvinyl acetate adhesives used on paper.

Therefore it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided a foamed polyvinyl acetate aqueous adhesive in the paper or paperboard core of Lennon et al. in order to provide improved adhesion and using less adhesive as taught or suggested by JP Patent No. 57143370

A.

6. Claims 6, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lennon et al. (U.S. Patent No. 5,586,963) in view of JP Patent No. 57143370 A (English translation of abstract provided herein), as applied to claims 5, 7-10, 12-13 and 15-17 above, and further in view of Saidman et al. (U.S. Patent No. 4,983,424).

Lennon et al. (U.S. Patent No. 5,586,963) in view of JP Patent No. 57143370 A (English translation of abstract provided herein) disclose the claimed invention except for the amount of foaming recited in claims 6 and 14. However, Saidman et al. teach foaming of a foamed adhesive (column 1, lines 5-16 and column 2, lines 23-49) wherein the amount of foaming can be 33 or 55% by weight (column 4, line 54 through column 5, line 33, since DV=M). Thus one of ordinary skill in the art would have recognized that the amount of foaming would be readily determined through routine experimentation depending on the desired end results absent some showing of unexpected results.

Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the amount of foaming recited in claims 6 and 14 in order to lower production costs due to less adhesive material being used, since it has been held that where the general conditions of a claim are disclosed in the prior art,

discovering the optimum or workable ranges or an optimum value of a result effective variable involves only routine skill in the art (applies to instant claims 6 and 14). See MPEP 2144.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lennon et al. (U.S. Patent No. 5,586,963) in view of JP Patent No. 57143370 A (English translation of abstract provided herein), as applied to claims 5, 7-10, 12-13 and 15-17 above, and further in view of Knauf (U.S. Patent No. 5,415, 910).

Lennon et al. disclose applicant's invention substantially as claimed. However, Lennon et al. do not teach that the tube is a food container.

Knauf illustrates that a paper or paperboard tube which is a food container is well known in the art and it would have been obvious to one of ordinary skill in the art to use the tube of Lennon et al. as a food container in order to reduce costs.

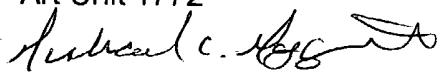
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Miggins whose telephone number is (571) 272-1494. The examiner can normally be reached on Monday-Friday; 1:30-10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pyon Harold can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael C. Miggins  
Examiner  
Art Unit 1772



MCM  
October 18, 2004